

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for computer-aided intravenous delivery of a drug to a patient during a whole duration of an anesthetic procedure on the patient, the system comprising:

a knowledge base that stores a set of written procedures to steer intravenous delivery of drugs for the anesthetic procedure, the written procedures adapted to types of surgical actions, physical conditions of patients, types of drugs, tools used to administer the drugs, and theoretical models of the drugs, the set of written procedures including at least a first procedure and a second procedure;

a sensor coupled to the patient, the sensor generating a signal that reflects a health condition or status of the patient;

an Infusion Session Manager that steers delivery of the drug for the anesthetic procedure, the Infusion Session Manager comprising:

an Infusion Controller arranged to deliver an amount of the drug intravenously to the patient for the anesthetic procedure;

a Communication Controller connected with infusion pumps and monitors;

a DataLogger controller that receives the signal from the sensor;

a Graphical User Interface that displays different views of the system and that accepts user input;

a first interface that links the Infusion Controller to one of the views displayed by the Graphical User Interface;

a Session Controller that runs the first procedure,

the Session Controller dynamically adapting the first procedure during the anesthetic procedure based on the signal from the sensor or an observation from a user, or

the Session Controller selecting and running the second procedure based upon the signal from the sensor or the observation from the user;

a second interface linking the Session Controller to the views displayed by the Graphical User Interface; and

a third interface that links the DataLogger Controller to the views displayed by the Graphical User Interface.

2. (Cancelled).

3. (Previously Presented) The system according to claim 1, further comprising:

an Archiving Manager which is in contact with the Infusion Session Manager, the Archiving Manager storing data needed to restart or recover actions after a power cut, a technical failure, breakdown, or decoupling; and

a program that controls the Infusion Session Manager and the Archiving Manager.

4. (Previously Presented) The system according to claim 3, wherein the Archiving Manager and the Infusion Session Manager are independently transportable units.

5-6. (Cancelled)

7. (Previously Presented) The system according to claim 1, wherein a running procedure in the set of written procedures is launched or changed in response to an internal state or in response to an externally received command.

8. (Currently Amended) The system according to claim 1, wherein at least one of the written procedures contains a preprogrammed script of tasks or commands per major event, phase or step in a surgery.

9. (Previously Presented) The system according to claim 1, wherein the Infusion Controller administers at least one intravenous drug selected from a group consisting of a hypnotic, an analgesic, an amnesic, a paralyzing agent, a vasodepressor and a pressor substance and a cancer therapy drug.

10. (Previously Presented) The system according to claim 9, wherein the hypnotic is propofol.

11. (Previously Presented) The system according to claim 10, wherein a drug state model for propofol is that of Schnider.

12. (Previously Presented) The system according to claim 9, wherein the Infusion Controller administers the cancer therapy drug in combination with antibiotics.

13. (Cancelled).

14. (Currently Amended) The system according to claim 1, wherein the system comprises a delay requiring ensures that a minimal amount of time has to pass between two subsequent modifications to one of the written procedures.

15. (Previously Presented) The system according to claim 1, wherein a reliability of the signal is determined by a quality of the signal, by a relation of the signal with other related signals or parameters, or by a deviation of the signal from a normal value or from a safe range.

16. (Previously Presented) The system according to claim 9, wherein the analgesic is remifentanil.

17. (Previously Presented) The system according to claim 9, wherein the paralyzing agent is mivacurium.

18. (Previously Presented) The system of claim 16, wherein a drug state model for remifentanil is that of Minto.

19. (Currently Amended) A method for intravenous anesthesia which comprises a step of comprising obtaining an intravenous delivery of a drug to a patient for an anesthetic procedure by the system of claim 1 a system for computer-aided intravenous delivery of a drug to a patient during a whole duration of an anesthetic procedure on the patient, the system comprising:

a knowledge base that stores a set of written procedures to steer intravenous delivery of drugs for the anesthetic procedure, the written procedures adapted to types of surgical actions, physical conditions of patients, types of drugs, tools used to administer the drugs, and theoretical models of the drugs, the set of written procedures including at least a first procedure and a second procedure;

a sensor coupled to the patient, the sensor generating a signal that reflects a health condition or status of the patient;

an Infusion Session Manager that steers delivery of the drug for the anesthetic procedure,
the Infusion Session Manager comprising:

an Infusion Controller arranged to deliver an amount of the drug intravenously to the
patient for the anesthetic procedure;

a Communication Controller connected with infusion pumps and monitors;

a DataLogger controller that receives the signal from the sensor;

a Graphical User Interface that displays different views of the system and that accepts
user input;

a first interface that links the Infusion Controller to one of the views displayed by the
Graphical User Interface;

a Session Controller that runs the first procedure,

the Session Controller dynamically adapting the first procedure during the anesthetic
procedure based on the signal from the sensor or an observation from a user, or

the Session Controller selecting and running the second procedure based upon the signal
from the sensor or the observation from the user;

a second interface linking the Session Controller to the views displayed by the Graphical
User Interface; and

a third interface that links the DataLogger Controller to the views displayed by the
Graphical User Interface.

20. (Previously Presented) A method for the treatment of cancer which comprises a step of obtaining an intravenous delivery of a drug to a patient by the system of claim 1.
21. (Previously Presented) The system of claim 1, wherein the Graphical User Interface shows the signal generated by the sensor, measured values of health parameters, or interpretations of the measured values of the health parameters.
22. (Previously Presented) The system of claim 1, wherein the signal generated by the sensor reflects values of health parameters selected from a group consisting of: continuous ECG, registration with analysis of a ST segment, invasive arterial pressure, continuous registration of right pressures via a Swan-Ganz catheter in a pulmonary artery, cardiac flux, venal oxygen saturation, transesophageal echocardiography, monitoring of insufflations pressures, capnography, arterial and venal oxygen saturation in blood sample or a mixture thereof.
23. (Previously Presented) The system of claim 1, further comprising a patient health monitor of minimum or maximal limit values of physiological parameters recorded when reaching or exceeding a limit concentration of the drug.
24. (New) The system of claim 1, further comprising a plurality of settings for different experience levels of the user controlling the ability of the user to make changes to the system.
25. (New) The system according to claim 24, wherein the plurality of settings includes a setting for an expert experience level and wherein permanent changes to the written procedure may be made only if the user has an expert level of experience.
26. (New) The system of claim 1, wherein the set of written procedures is in the form of a script.